



**ANNUAL REPORT**

<b>Drinking-Water System Number:</b>	#220000585
<b>Drinking-Water System Name:</b>	Parry Sound Drinking Water Treatment System
<b>Drinking-Water System Owner:</b>	Corporation Town of Parry Sound
<b>Drinking-Water System Category:</b>	"Large Municipal Residential: Drinking Water System
<b>Period being reported:</b>	2010: January 2010 to December 31, 2010

<p><b><u>Complete if your Category is Large Municipal Residential or Small Municipal Residential</u></b></p> <p>Does your Drinking-Water System serve more than 10,000 people? Yes [ ] No [x]</p> <p>Is your annual report available to the public at no charge on a web site on the Internet? Yes [ ] No [x]</p> <p>Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Town of Parry Sound              Tony Agnello Water Treatment Plant              10 Salt Dock Road              Parry Sound, On P2A-3B6              Phone 705-746-5641</p> </div>	<p><b><u>Complete for all other Categories.</u></b></p> <p>Number of Designated Facilities served:  <div style="border: 1px solid black; padding: 2px; width: 100px; text-align: center;">N/A</div></p> <p>Did you provide a copy of your annual report to all Designated Facilities you serve?              Yes [ ] No [ ]</p> <p>Number of Interested Authorities you report to:  <div style="border: 1px solid black; padding: 2px; width: 100px; text-align: center;">N/A</div></p> <p>Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?              Yes [ ] No [ ] N/A</p>
---	---

**Note: For the following tables below, additional rows or columns may be added or an appendix may be attached to the report**

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Drinking Water System Name	Drinking Water System Number
McDougall Nobel distribution, LMR-DWS	

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?  
 Yes [x] No [ ]



Indicate how you notified system users that your annual report is available, and is free of charge.

- Public access/notice via the web
- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method \_\_\_\_\_

**Describe your Drinking-Water System**

The Town of Parry Sound 's Water Treatment System which is classified under the Safe Drinking Water Act (SDWA) and Ontario Reg. 170/03 –“Drinking Water Systems” Regulation (as amended) is categorized as a “Large Municipal Residential” Drinking Water System. The detailed description of the system is provided in Ministry of Environment Certificate of Approval No. 0584-6VDLT3 dated December 19, 2006 and amended March 14, 2008 by Certificate of Approval No 2841-7BUQXX. In general, the Parry Sound Large Municipal Residential Drinking-Water System can be described as follows

- Gravity fed 0.76 meter diameter polyethylene water intake approximately 175 meters out in the Big Sound of Georgian Bay at the foot of Waubeek Street. It includes an intake structure, which retards intake velocities and discouraged fish etc. from entering. The intake is approximately 16 meters below water surface.
- The treatment plant is a state-of-the-art vacuum driven hollow tube ultra filtration membrane system, which consists of the following major components;
  - o a low lift pumping station
  - o twin raw water feed tanks containing 96 membrane elements packaged into 12 cassettes, (six on each of 2 trains)
  - o membrane filtration facilities consisting of the membranes themselves as well as vacuum Permeate pumps, back pulse tanks with associated valves and controls
  - o a membrane integrity Testing System (MIT)
  - o a membrane cleaning system
  - o chemical feed system including; sodium hypochlorite (chlorination) feed system, sodium bisulphate, sodium thiosulphate (dechlorination) system, poly-aluminum chloride (coagulant) system, fluoridation feed system, polymer feed system (related to the waste side rather than drinking water side).
  - o Chlorine contact tank
  - o Clearwater reservoir
  - o High lift pumps
  - o Generator room (providing backup power in the event of a hydro outage)
- Distribution system serving the Town of Parry Sound
- Storage facilities at North Sector, Parry Sound Drive (McDougall Township) and Bowes Street
- Booster pumping facilities at one location within the distribution facility

The process at the treatment plant employs membrane ultra filtration, augmented by colour removal capabilities for short periods when the raw water demonstrates a colour removal requirement (usually In conjunction with spring runoff from the Seguin River and/or Georgian Bay thermal flips), followed by chlorine disinfection and fluoride addition prior to delivery to the municipal distribution system

- The Parry Sound LMR-DWS provides treated water to the McDougall Nobel distribution System LMR-DWS from a point at the base of the North Sector Tower commencing on 2006-12



**List all water treatment chemicals used over this reporting period**

The following water treatment chemicals used with respect to the Parry Sound water treatment plant during the period January 1, 2010 to December 31, 2010.

- sodium hypochlorite (for finished water disinfection and membrane cleaning)
- sodium bisulphate (for dechlorination)
- sodium thiosulphate (for dechlorination)
- poly aluminum chloride (for coagulant during period(s) of high raw water colour)
- hydrofluosilicic acid (for fluoride addition-dental care)
- citric acid (for cleaning)

For Waste Stream Treatment not included in drinking water treatment

- polymer (to induce settling)

**Were any significant expenses incurred to?**

- Install required equipment
- Repair required equipment
- Replace required equipment

**Please provide a brief description and a breakdown of monetary expenses incurred**

Replace 4” cast iron main on Cascade St

**Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre**

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
2010-04-12	Fluoride spike	2.9	ppm	Tech. attended and repaired analyzer	2010-04-16
2010-06-27	Low adequate Disinfection	N/A	N/A	Repair pump	2010-06-27
2010-07-26	Fluoride spike	1.6	ppm	Analyzer maintenance	2010-07-27
2010-08-15	Fluoride spike	2.5	ppm	N/A	2010-08-19
2010-08-16	Low chlorine residual in water main	0.02	ppm	Flush main	2010-08-19
2010-09-05	Fluoride spike	2.99	ppm	Analyzer maintenance	2010-09-07

**Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.**

	Number of Samples	Range of E.Coli Or Fecal Results (min #)-(max #)	Range of Total Coliform Results (min #)-(max #)	Number of HPC Samples	Range of HPC Results (min #)-(max #)
Raw	52	0 to 22	0 to 65	52	0 to 165



Treated	52	0 to 0	0 to 0	52	0 to 24
Distribution	202	0 to 0	0 to 0	202	0 to 20

**Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.**

	Number of Grab Samples	Range of Results (min #)-(max #)
Turbidity	8760	0.002ntu to 0.440ntu**
Chlorine	8760	0.642 to 1.351
Fluoride (If the DWS provides fluoridation)	8760	0.003 to 2.994*

*NOTE: For continuous monitors use 8760 as the number of samples.*

**\*\*High readings due to calibration of analyzer. This is not a reportable incident**  
**\*High readings due to malfunctioning analyzer. This is not a reportable incident**  
**NOTE: Record the unit of measure if it is not milligrams per liter.**

**Summary of additional testing and sampling carried out in accordance with the requirement of an approval, order or other legal instrument.**

Date of legal instrument issued	Parameter	Date Sampled	Result	Unit of Measure

**Summary of Inorganic parameters tested during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	10/06//28	0.11	ug/L	No
Arsenic	10/06//28	0.3	ug/L	No
Barium	10/06//28	9.87	ug/L	No
Boron	10/06//28	11	ug/L	No
Cadmium	10/06//28	0.003<MDL	ug/L	No
Chromium	10/06//28	0.5<MDL	ug/L	No
Mercury	10/06//28	0.02<MDL	ug/L	No
Selenium	10/06//28	1<MDL	ug/L	No
Sodium	10/06//28			
Uranium	10/06//28	0.068	ug/L	No
				No
Nitrite	10/06//28	0.005<MDL	ug/L	No
Nitrate	10/06//28	0.259	ug/L	No

\*only for drinking water systems testing under Schedule 15.2; this includes large municipal non-residential systems, small municipal non-residential systems, non-municipal seasonal residential systems, large non-municipal non-residential systems, and small non-municipal non-residential systems

**Summary of lead testing under Schedule 15.1 during this reporting period**

(applicable to the following drinking water systems; large municipal residential systems, small municipal residential systems and non-municipal year-round residential systems)

Location Type	Number of Samples	Range of Lead Results (min#) – (max #)	Number of Exceedances
Plumbing			
Distribution			

**Summary of Organic parameters sampled during this reporting period or the most recent sample results**

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	10/06//28	0.02<MDL	ug/L	No
Aldicarb	10/06//28	0.01<MDL	ug/L	No
Aldrin + Dieldrin	10/06//28	0.01<MDL	ug/L	No
Atrazine + N-dealkylated metabolites	10/06//28	0.01<MDL	ug/L	No
Azinphos-methyl	10/06//28	0.02<MDL	ug/L	No
Bendiocarb	10/06//28	0.01<MDL	ug/L	No
Benzene	10/06//28	0.32<MDL	ug/L	No
*Benzo(a)pyrene	10/06//28	0.004<MDL	ug/L	No
Bromoxynil	10/06//28	0.33<MDL	ug/L	No
Carbaryl	10/06//28	0.01<MDL	ug/L	No
Carbofuran	10/06//28	0.01<MDL	ug/L	No
Carbon Tetrachloride	10/06//28	0.41<MDL	ug/L	No
Chlordane (Total)	10/06//28	0.01<MDL	ug/L	No
Chlorpyrifos	10/06//28	0.02<MDL	ug/L	No
Cyanazine	10/06//28	0.16<MDL	ug/L	No
Diazinon	10/06//28	0.03<MDL	ug/L	No
Dicamba	10/06//28	0.20<MDL	ug/L	No
1,2-Dichlorobenzene	10/06//28	0.41<MDL	ug/L	No
1,4-Dichlorobenzene	10/06//28	0.36<MDL	ug/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	10/06//28	0.01<MDL	ug/L	No
1,2-Dichloroethane	10/06//28	0.35<MDL	ug/L	No
1,1-Dichloroethylene (vinylidene chloride)	10/06//28	0.33<MDL	ug/L	No
Dichloromethane	10/06//28	0.35<MDL	ug/L	No
2-4 Dichlorophenol	10/06//28	0.15<MDL	ug/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	10/06//28	0.19<MDL	ug/L	No
Diclofop-methyl	10/06//28	0.40<MDL	ug/L	No
Dimethoate	10/06//28	0.03<MDL	ug/L	No
Dinoseb	10/06//28	0.36<MDL	ug/L	No
Diquat	10/06//28	1<MDL	ug/L	No
Diuron	10/06//28	0.003<MDL	ug/L	No



Glyphosate	10/06//28	6<MDL	ug/L	No
Heptachlor + Heptachlor Epoxide	10/06//28	0.01<MDL	ug/L	No
Lindane (Total)	10/06//28	0.01<MDL	ug/L	No
Malathion	10/06//28	0.02<MDL	ug/L	No
Methoxychlor	10/06//28	0.14<MDL	ug/L	No
Metolachlor	10/06//28	0.01<MDL	ug/L	No
Metribuzin	10/06//28	0.02<MDL	ug/L	No
Monochlorobenzene	10/06//28	0.30<MDL	ug/L	No
Paraquat	10/06//28	1<MDL	ug/L	No
Parathion	10/06//28	0.02<MDL	ug/L	No
Pentachlorophenol	10/06//28	0.15<MDL	ug/L	No
Phorate	10/06//28	0.01<MDL	ug/L	No
Picloram	10/06//28	0.025<MDL	ug/L	No
Polychlorinated Biphenyls(PCB)	10/06//28	0.04<MDL	ug/L	No
Prometryne	10/06//28	0.03<MDL	ug/L	No
Simazine	10/06//28	0.01<MDL	ug/L	No
THM (NOTE: show latest annual average)	10/06//28	79	ug/L	No
Temephos	10/06//28	0.01<MDL	ug/L	No
Terbufos	10/06//28	0.01<MDL	ug/L	No
Tetrachloroethylene	10/06//28	0.35<MDL	ug/L	No
2,3,4,6-Tetrachlorophenol	10/06//28	0.14<MDL	ug/L	No
Triallate	10/06//28	0.01<MDL	ug/L	No
Trichloroethylene	10/06//28	0.43<MDL	ug/L	No
2,4,6-Trichlorophenol	10/06//28	0.25<MDL	ug/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	10/06//28	0.22<MDL	ug/L	No
Trifluralin	10/06//28	0.12<MDL	ug/L	No
Vinyl Chloride	10/06//28	0.17<MDL	ug/L	No

\* See—MOE Compliance Inspector—Sherri Ilersich (Badge #883) re: Benzo (a) pyrne

**List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.**

Parameter	Result Value	Unit of Measure	Date of Sample